



PNI Ecosafe - 98

LOW-TOXICITY GOLD EXTRACTION REAGENT



**Where innovative extraction technology meets responsible
gold recovery**





A PRIVATE-LABEL GOLD RECOVERY SOLUTION

PNI Ecosafe - 98 is supplied and commercially managed by Persian Nevisa International as a private-label precious-metal extraction reagent.

- Private-label ownership: Persian Nevisa International (PNI).
- Leadership: CEO - Mr. Shahriar Mehdizadeh.
- Applications: mineral-ore leaching and selected electronic-waste precious-metal recovery.
- Process compatibility: CIL, CIP, vat leaching, heap leaching, carbon adsorption and zinc cementation.
- Technical approach: alkaline, multi-component reagent supplied as granules or powder.
- Project support: sample testwork, dosage optimization, flowsheet review and supply coordination.





DESIGNED FOR PRACTICAL ADOPTION

1

DUAL APPLICATION

Ore mining: Au/Ag extraction from suitable ores.
Urban mining: precious-metal recovery from selected e-waste feedstocks.

2

LOWER HAZARD PROFILE

A low-toxicity alternative to conventional cyanide or mercury routes, based on supplied source test data.

3

PROCESS COMPATIBILITY

Designed to integrate with conventional alkaline leaching and common gold-recovery methods.

4

OPERATIONAL EFFICIENCY

Source testwork reports 24-48 hour extraction cycles and dosage ranges typically evaluated between 1 and 5 kg/t.

5

SIMPLIFIED LOGISTICS

Supplied documents describe the product as ordinary/non-dangerous goods, subject to jurisdictional confirmation.

6

PROJECT-SPECIFIC TESTING

Ore mineralogy strongly affects recovery. Representative bottle-roll or pilot testing is required before scale-up.

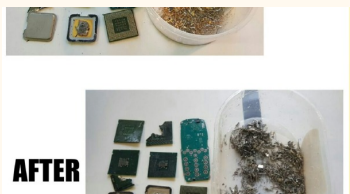


CONVENTIONAL METHOD VS. PNI Ecosafe - 98

TRADITIONAL METHOD	PNI Ecosafe - 98
Cyanide / mercury routes	Lower-toxicity multi-component reagent
Complex hazardous-material controls	Simplified handling basis in supplied documentation
Commonly focused on ore processing	Ore and selected e-waste applications
High environmental consequences if mismanaged	Reduced hazard objective; site controls still required

SOURCE COMPARATIVE LEACHING TEST - Au EXTRACTION (%)

GRADE / DOSAGE	NaCN 24h	PNI 24h	NaCN 48h	PNI 48h
Low grade - 1 kg/t	89.0	91.1	87.0	89.7
Low grade - 2 kg/t	90.4	90.5	90.3	89.5
Low grade - 5 kg/t	71.6	80.4	70.9	79.0
Medium grade - 1 kg/t	91.7	90.6	92.3	89.8
Medium grade - 2 kg/t	91.1	71.1	90.7	92.3
Medium grade - 5 kg/t	95.1	96.7	91.1	91.3
High grade - 1 kg/t	91.5	93.0	94.6	93.4
High grade - 2 kg/t	93.2	95.6	92.6	96.6
High grade - 5 kg/t	89.2	93.6	95.7	95.7



Results are reproduced from supplied source marketing material and must not be generalized to untested ore. PNI recommends independent representative testwork.



THIRD-PARTY ECOTOXICITY DATA

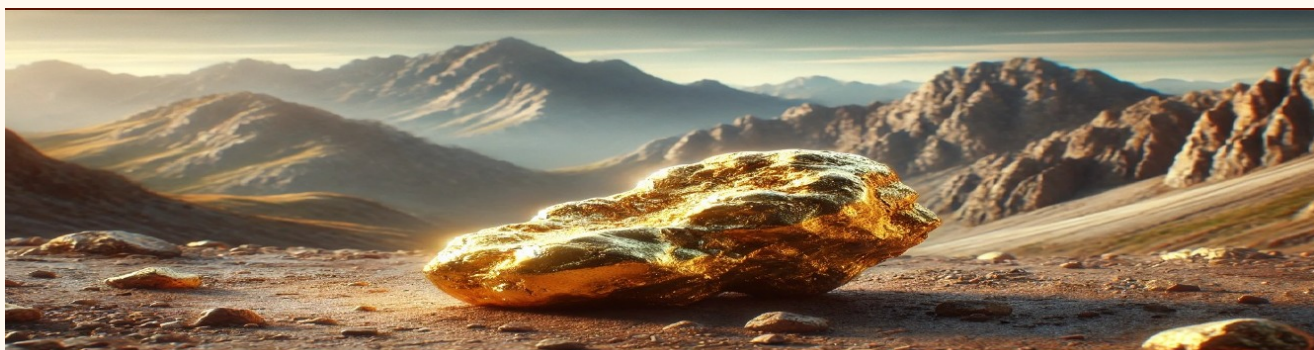


Rainbow trout acute lethality:
The supplied AGAT certificate reports $LC_{50} = 0.793 \text{ mg/L}$,
equivalent to 793 ug/L.

Source integrity: The original laboratory certificate names Eco-Goldex Inc. as the client and John Guo as the attention contact. PNI has not altered or reassigned that certificate. PNI Ecosafe - 98 documentation reproduces the technical result as source data for the private-label formulation.

DATA VERIFICATION NOTE

Supplied documents contain differing rat oral LD50 figures: 485 mg/kg in the SDS, 584 mg/kg in the brochure table, and a wider 584-680 mg/kg range in the company profile. A final certified value should be confirmed before regulatory submission or public claims.





TYPICAL CHEMICAL TOXICITY LEVELS

CHEMICAL	LC50 - RAINBOW TROUT (ug/L)	ORAL LD50 - RAT (mg/kg)
Cyanide	28	4.3-15
CuSO4.2H2O	750	482
ZnCl2	550	329
PNI Ecosafe - 98 source data	793	485-584*
HgCl2	84.5 (48 h)	-

HODGE AND STERNER ORAL TOXICITY SCALE

CLASS	TERM	ORAL LD50 (mg/kg)
1	Extremely toxic	1 or less
2	Highly toxic	1-50
3	Moderately toxic	50-500
4	Slightly toxic	500-5,000
5	Practically non-toxic	5,000-15,000
6	Relatively harmless	>15,000

*Range shown because the supplied source documents are inconsistent. Use the final certified SDS value approved for the destination market.



DOCUMENTED FOR INDUSTRIAL PROCUREMENT

PNI Ecosafe - 98 SDS

Five-section-page private-label SDS covering hazards, composition, first aid, handling, toxicology, ecology, disposal, transport and regulatory notes.

TRANSPORT STATUS

Supplied source documents state the material is not classified as dangerous goods. Importers must verify destination-country requirements.

HS CODE REFERENCE

3824.90.99.90 is stated in the source SDS. Final tariff classification must be confirmed by the importer and customs broker.

QUALITY CONTROL

Batch consistency, packaging integrity, certificate of analysis and retained samples should be included in each commercial supply plan.

SITE TESTING

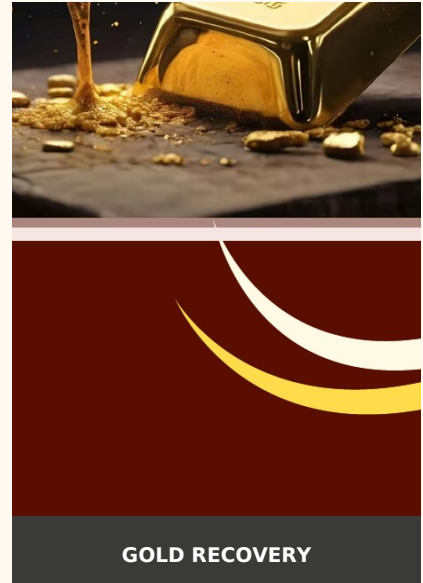
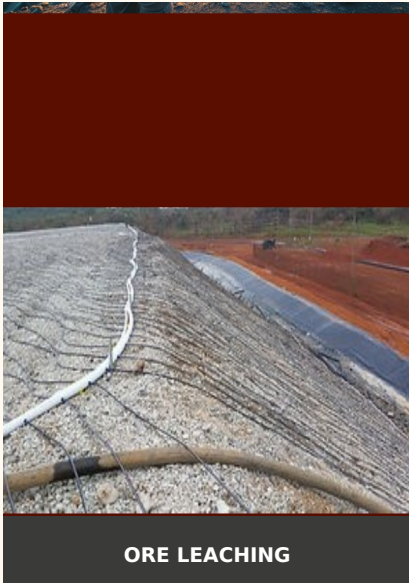
Reagent dosage and recovery must be validated using representative ore or e-waste before full-scale deployment.

THIRD-PARTY DOCUMENTS

Original certificates and signatures remain attributed to their actual issuers and named clients; they are not altered to display PNI as the recipient.



FROM SAMPLE TESTING TO SUPPLY



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